Periodization

A Guide to Volume & Intensity of Training & Competition
The Concept

Simply put, periodization is time management. Periodization involves creating very detailed training, competition and recovery plans in an effort to ensure that an athlete “peaks” at the right time.

How does one balance a myriad of factors that adolescence face as they develop; from school, to practice, physical preparation, competition, rest – all of these factors can significantly impact performance.

As a parent (or young athlete), understanding the basic premise of periodization and having a plan for your son / daughter will allow them to have the best opportunity to have success WHEN they truly need it.
The Concept

As a planning technique, Periodization provides a detailed plan for arranging the complex array of training factors into a logical and scientifically based schedule to bring about optimal improvements in performance. It is an essential component in optimal sports programming and athlete development at all levels.

The following slides will illustrate some of the Periodization concepts that are outlined in the Long-Term Player Development Guide for Golf in Canada.
The Concept

As a player matures (physically & mentally), the recommended length of competition (or # of holes played) increases. This is shown in detail on the following slide.

One can use the analogy of our children going to school to better understand why this is important. Children learn through lessons, then practice what they have learned. This is usually followed by an assessment of some kind, such as an exam or test.

Early on, the exams/tests are short and focused. However, as children mature, the length and difficulty of the tests/exams increases. This is the same with golf and all sports.
Recommended Length of Competition as Defined by Number of Holes

Ages by LTPD Stages:
- 6 to 9
- 8 to 12
- 11 to 16
- 15 to 18
- 17 to 23
- 23 to 29
- 23+

Legend:
- 9 holes or less
- Minimum # of 18-hole competitions
- Maximum # of 18-hole competitions
- Minimum # of 36-hole competitions
- Maximum # of 36-hole competitions
- Minimum # of 54-hole competitions
- Maximum # of 54-hole competitions
- Minimum # of 72-hole competitions
- Maximum # of 72-hole competitions

Competition Rounds:
0 5 10 15 20 25 30 35

Graph showing the recommended number of rounds for different age groups and competition lengths.
Number of Competitive Holes Annually by LTPD Stages of Development

Ages as defined through LTPD Stages

- 6 to 9: 0 holes
- 8 to 12: 171 holes
- 11 to 16: 450 holes
- 15 to 18: 1,116 holes
- 17 to 21: 1,710 holes
- 23 to 29: 2,610 holes
- 23+: 2,304 holes

Maximum # of competitive holes per year

Minimum # of competitive holes per year
The diagrams relating to the number of ball contacts, below, (weekly by stage and cumulatively over the course of several years) are provided as general guides to the overall technical expectation as well as emphasizing the need to set ‘performance’ or ‘outcome’ goals during technical practice (as denoted by the wording ‘quality ball contacts’). The ‘cumulative total’ figure, right, clearly shows that a player should build a substantial history or ‘critical mass’ of quality balls strikes’ over several years in order to provide a solid technical platform for the primary competitive years and that there is likely to be a range to this history rather than it being some actual fixed number depending upon several different factors (i.e., underlying ability, facilities, environment, instruction and coaching etc).
Periodization

In training for golf, it is important to have a suitable ratio of golf specific skill development (including appropriate ‘decision training’) vs. physical training.

At the “Learn to Play” stage (Boys 9-12 yrs old, Girls 8-11 yrs old), golf-specific skill development should be the primary focus (eg. 80% of training time shown in the following slide).

This recommendation is made due to this age period being highly sensitive the adaptation to skill-focused training. This aspect, should of course be continued & further emphasized into the next phase as well.

However, keep in mind that simple chronological age is not necessarily the best way to program for youngsters, particularly during the major physical growth period. Some athletes mature at an early age while others could be late developers.
Suggested Guide for Ratio of Golf-Specific Skill Development / Physical Training

(\% = overall bias of training time / resources)

- Learn to Play
  - Males 9 to 12
  - Females 8 to 11
  - 80% Skill, 20% Physical

- Train to Play
  - Males 12 to 16
  - Females 11 to 15
  - 60% Skill, 40% Physical

- Learn to Compete
  - Males 16 to 18
  - Females 15 to 17
  - 60% Skill, 40% Physical

- Train to Compete
  - Males 18 to 23+
  - Females 17 to 23+
  - 50% Skill, 50% Physical

- Train to Excel
  - Males 23 to 29
  - Females 23 to 28
  - 60% Skill, 40% Physical

- Excel
  - Males 23+
  - Females 23+
  - 60% Skill, 40% Physical
Building Periodization into your yearly plan

The following two slides illustrate ‘sample’ Yearly Training Plans for both the “Train to Play” and “Train to Compete” stages of development.

You will find that in the Competition Phases that the volume of training decreases while the intensity of training increases. This allows the athlete to be fresh (not fatigued or over tired) and ready to “peak” for his/her best result.

Throughout this stage, competition takes place but is used as part of training and the concept at this stage is to have one peak happening, typically later in the summer around a provincial or national event.
Building Periodization into your yearly plan

On the “Train to Play” diagram, the volume of training increases slightly immediately following competition as this is a good time to reflect, learn, correct mistakes and the player is just coming off a “peak”, so he/she should be well rested.

The “Train to Compete” diagram illustrates as the athlete gets older, their plan will probably include a schedule that will require a “double peak” (ie; peaking for both provincial & national championships). However, the concepts with respect to volume and intensity remain similar.

Finally, it should be noted that the ‘periodization’ or pattern of activity of an elite ‘Tour’ player is of a different format than that of the young developing player, as one would expect.
Suggested Yearly Training Plan During the ‘Train to Play’ Phase
(blocks denote overall volume / intensity load)

<table>
<thead>
<tr>
<th>General Preparation</th>
<th>Specific Preparation</th>
<th>Pre-competition</th>
<th>Competition Phase</th>
<th>Skill Focus</th>
<th>Rec/Regen</th>
</tr>
</thead>
</table>

*Note ‘Skill Focus’ in immediate post competition phase
Terminology based upon Bompa, 1999

**Volume of training / competition guide**
**Intensity of training / competition guide**
Suggested Yearly Training Plan During the ‘To Compete’ Phase
(blocks denote overall volume / intensity load)

<table>
<thead>
<tr>
<th>General Preparation</th>
<th>Specific Preparation</th>
<th>Pre-comp</th>
<th>Competition Phase I</th>
<th>Break</th>
<th>Competition Phase II</th>
<th>Rec/Regen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical development and consolidation of basic technical golf skills.</td>
<td>Continuation of previous phase, plus gradual shift towards competition prep.</td>
<td>Focus is appropriate execution of technique and tactics under competition environment, together with systematic performance evaluation. Physical conditioning maintained.</td>
<td></td>
<td></td>
<td></td>
<td>Recovery and regeneration period.</td>
</tr>
</tbody>
</table>

Terminology based upon Bompa, 1999

Volume of training / competition guide
Intensity of training / competition guide
For more information on Periodization

If you would like some additional or more in depth information on periodization, please visit the following websites:

1) Canadian Sport For Life (CS4L) –
http://www.canadiansportforlife.ca/ten-key-factors/periodization

2) Coaching Association of Canada (CAC) – www.coach.ca